

AB VOLVO PENTA

EXECUTIVE ORDER U-R-014-0087

New Off-Road Compression-Ignition Engines

Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control system produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)		
2005	5VPXL09.6ACB	9.6	Diesel	8000		
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION			
Direct Diesel Injection, Turbocharger, Charge Air Cooler			Generator Set			

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for hydrocarbon (HC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kW-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED	EMISSION		EXHAUST (g/kW-hr)				OPACITY (%)			
POWER CLASS	STANDARD CATEGORY		нс	NOx	NMHC+NOx	со	РМ	ACCEL	LUG	PEAK
225 < kW < 450	Tier 2	STD	N/A	N/A	6.4	3.5	0.20	N/A	N/A	N/A
		CERT	-	-	5.9	1.8	0.12	-	-	_

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this ______ day of December 2004

Allen Lygns, Chief

Mobile Source Operations Division

Engine Model Summary Form

AB VOLVO PENTA ifacturer;

The category: Nonroad CI Engine Family: 5VPXL09.6ACB

amily Name: TAD1031GE

New Submission ess Code:

Attachnar F 4.4-014-0087

	4		
8 Fuel Rate: 9 Emission Control lbs/hr)@peak torque Device Per SAE J1930	150@1560 DDI, TC, CAC ►	-	
8 Fuel Rate: (lbs/hr)@peak torque		133@1427	:
7.Fuel Rate: mm/stroke@peak torque	@1800 248@1560	219@1427	
6.Torque @ RPM (SEA Gross)	1560	1427@1800	
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	150@394	133@360	
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	1		
3.BHP@RPM (SAE Gross)	394@1800	219@1800	
4.Fuel Rate: 3.BHP@RPM mm/stroke @ peak spine Code 2.Engine Model (SAE Gross) (for diesel only)	TAD 1031GE	2 TAD 1031GE 219@1800 219@360	
ngine Code	-	2	: